



# AUGMENTING LEARNING WITH TECHNOLOGY

Dr. Sarvamangala<sup>1</sup> | Dr. Sharmista<sup>2</sup>

<sup>1</sup> Chairma, DOS IN Education, University of Mysore, Mysore.

<sup>2</sup> Assiatant Professor, BGS.B.Ed College, Mysore.

## ABSTRACT

With the advent of technology, the education sector has witnessed great changes and transformations. Technology has revolutionised the way we impart knowledge and has blurred boundaries. Today, anyone can study or take lessons from an educator, who is living on the other end of the globe through online and distant learning courses. Schools are slowly realising that education can be best delivered through various technological advancements the market provides. Classrooms are gradually shifting towards contemporary teaching where learning happens through computers as well as books. Technology augments the teaching skills of teachers and the learning abilities of students. Had it not been for the integration of information and communication technologies, audio visual education would have been a distant dream. Its growth has reflected developments in learning theories.

## Introduction

Augmenting learning with technology is the use of technology in general content areas in education in order to allow students to apply computer and technology skills to learning and problem-solving. Generally speaking, the curriculum drives the use of technology and not vice versa (Robinson et.al, 2016, Richey, R.C. 2008). Technology integration is defined as the use of technology to enhance and support the educational environment.. Technology integration in class would help students to explore more (Randy Garrison; Terry Anderson, 2003). Curriculum integration with the use of technology involves the infusion of technology as a tool to enhance the learning in a content area or multidisciplinary setting. Effective integration of technology is achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally. The technology should become an integral part of how the classroom functions—as accessible as all other classroom tools. The focus in each lesson or unit is the curriculum outcome, not the technology (Al Januszewski A.; Molenda Michael. 2007). Integrating technology with standard curriculum can not only give students a sense of power, but also allows for more advanced learning among broad topics. However, these technologies require infrastructure, continual maintenance and repair – one determining element, among many, in how these technologies can be used for curricula purposes and whether or not they will be successful (Lowenthal, P. R.; Wilson, B. G. 2010). Examples of the infrastructure required to operate and support technology integration in schools include at the basic level electricity, internet service providers, routers, modems, and personnel to maintain the network, beyond the initial cost of the hardware and software (Selwyn, N. 2011).

## The many advantages

- If used correctly, will help prepare students for their future careers, which will inevitably include the use of wireless technology.
- Integrating technology into the classroom is definitely a great way to reach diversity in learning styles.
- It gives students the chance to interact with their classmates more by encouraging collaboration.
- Technology helps the teachers prepare students for the real world environment. As our nation becomes increasingly more technology-dependent, it becomes even more necessary that to be successful citizens, students must learn to be tech-savvy.
- Integrating technology in education everyday helps students stay engaged. Today's students love technology so they are sure to be interested in learning if they can use the tools they love.
- With technology, the classroom is a happier place. Students are excited about being able to use technology and therefore are more apt to learn.
- When mobile technology is readily available in the classroom, students are able to access the most up-to-date information quicker and easier than ever before.
- The traditional passive learning mold is broken. With technology in the classroom the teacher becomes the encourager, adviser, and coach.

- Students become more responsible. Technology helps students take more control over their own learning. They learn how to make their own decisions and actually think for themselves.
- Student can have access to digital textbooks that are constantly updated and often more vivid, helpful, creative, and a lot cheaper than those old heavy books.

## Use of technology in the Indian classrooms

Multimedia technologies assist in communicating ideas and describing projects. In today's digital world, students are encouraged to use technology in all aspects of their studies. With this, the pace of imparting knowledge is becoming faster and the access to information anytime, anywhere, is redefining the education system in India. Therefore, the largest benefit for schools is to have access to information when technology is integrated in the core learning processes. The government is focused on building digital India where quality education reaches the most inaccessible corners driven by digital learning. With government's clear focus in increasing connectivity, more and more students will have access to the Internet. Public universities are slated to provide Wi-Fi access to students soon and hopefully such initiatives will percolate down to the school level as well. The government has declared that books and learning materials of CBSE curriculum would be made available online for free for students around the country soon. These are all steps in the right direction. Schools with limited libraries are now looking up to the Internet so as to help the children. Many educators use Open Education Resources (OER), which are freely accessible documents used for teaching and learning. The Indian government is also implementing various initiatives to boost new education techniques, such as e-learning and m-learning. As technology is being used increasingly across many international schools in India, many teachers are also being trained in this matter to deliver better results. Models such as Flipped classroom are being employed in various schools. With time, we are also noticing that the technological trends are gradually being adopted amongst schools to stay connected. For example, teachers are looped in on Twitter and are also developing a Personal Learning Network (PLN), which allows them to gain ideas and share information outside school communities. And of course, Google is the best friend of almost every student. With the use of technology and software, more number of students have reported that they have become organised and engaged. They now set reminders and alerts on their laptops and tablets to help them remember their assignments and projects. They can save their worksheets electronically without having to worry about misplacing them. For teachers, students and parents, there is an immediate accountability with technology. With technology integration, all courses are placed online with an open forum and there's transparency in the educational processes. They can keep a tab on the learning objectives, tests and exams and they can see the results online as well. But there's a dark side too. The open access to technology for students could be a concern for parents. One can get easily distracted with such modern gadgets. Today's students belong to a tech-savvy generation where information is only a click away. Now, the question is, what should be done in order to use the Internet and the abundant information in the right way? The most effective solution is the responsible use of technology. After all, it is our responsibility to teach the younger generations about what is acceptable and what is not. Many schools conduct workshops with parents and students to educate them about the use and ownership of the technological devices. It is important for students to understand that these devices need to be used appropriately; when to it and with balance. If we choose it, the education sector won't be reformed it's time we cashed in on this digital movement and usher in a glorious future.

**Reasons for bringing technology into their schools****Support Thinking Processes**

Computer-based technologies could provide support for thinking processes. Technology can provide for acquiring complex concepts, for example by graphically representing abstract concepts such as acceleration, or by providing scaffolding for thinking, such as the cognitive prompts embedded in CSILE (Computer-Supported Intentional Learning Environments).

**Stimulate Motivation and Self-Esteem**

A second frequently cited rationale for introducing technology was to stimulate motivation and self-esteem. Through either personal experience or a review of the literature, many innovators perceived the dramatic effects that technology can have on students' interest in class activities and their sense of their own capabilities. Most of the student bodies coming predominantly from low-SES homes benefit from technology. In the case of several schools serving students from low-income homes, technology innovators stressed the importance of giving these students the technology tools that would equip them to compete with children coming from more affluent homes where technology is commonplace. Thus, a related reason for using technology is the promotion of equity.

**Prepare Students for the Future**

The concern for equity is related to a fourth major motivation for introducing technology--to prepare students for the future, a future in which both higher education and the world of work would be infused with technology. Schools have a responsibility to give students--and especially students from low-income homes--the confidence and skills in using such technology that they will need after graduation.

**Support Changes in School Structure**

Researchers have argued that technology has the potential to dramatically change the way in which schools are structured--providing pressure to do away with the division of instructional time into small blocks and discrete disciplines and to rethink the way physical classrooms and teaching resources are used (Newman, 1990). Technology frees up teacher time by taking over or supporting administrative and routine teaching tasks.

**Conclusion.**

Technology contributes to global development and diversity in classrooms and helps develop upon the fundamental building blocks needed for students to achieve more complex ideas. In order for technology to make an impact within the educational system, teachers and students must access to technology in a contextual matter that is culturally relevant, responsive and meaningful to their educational practice and that promotes quality teaching and active student learning.

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